

## IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Marie-Anne PETIT et al.

Conf.

Application No. NEW NATIONAL PHASE

Group

Filed September 21, 2005

Examiner

ANTIBODIES DIRECTED AGAINST HEPATITIS C VIRUS E1E2 COMPLEX,  
COMPOSITIONS OF HCV PARTICLES, AND PHARMACEUTICAL COMPOSITIONS

INFORMATION DISCLOSURE STATEMENT  
(SUBMISSION CONCURRENT WITH THE  
FILING OF A NEW PATENT APPLICATION)

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

September 21, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, and in fulfillment of the duty of disclosure under 37 C.F.R. § 1.56, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- ☐ Copies of the U.S. patents or publications are not submitted since the USPTO has waived their submission for applications filed after June 30, 2003.
- ☒ Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☐ This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should have been forwarded from the International Search Authority pursuant to the trilateral agreement between the USPTO, EPO and JPO, or they are U.S. patents or U.S. published applications. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE  
(check at least one box)

a. ☐ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The attached non U.S. patents, non U.S. patent application publications, foreign publications, or other information in the English language do not require a statement of relevancy.

b. ☐ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

c. ☒ **FOREIGN SEARCH REPORT OR ACTION**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A) (3).

d. ☐ **OTHER**

The following additional information is provided for the Examiner's consideration.

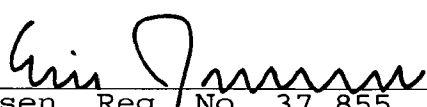
FEEs

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If The Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned.

Respectfully submitted,

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Enclosures: ☒ Form PTO-1449(s)  
☒ Documents  
☒ Foreign Search Report  
☐ Other: \_\_\_\_\_

10/550295  
NEW NATIONAL PHASE**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**

(Use several sheets if necessary)

Attorney Docket No.:  
**0508-1140**Applicant:  
**Marie-Anne PETIT et al.**Filing Date:  
**September 21, 2005**

Group Art Unit:

**U.S. PATENT DOCUMENTS**

| Examiner Initial | Document Number | Date | Name | Class | Subclass | Filing date (if appropriate) |
|------------------|-----------------|------|------|-------|----------|------------------------------|
|                  |                 |      |      |       |          |                              |
|                  |                 |      |      |       |          |                              |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initial | Document Number | Date       | Country       | Class | Subclass | Translation |
|------------------|-----------------|------------|---------------|-------|----------|-------------|
|                  |                 |            |               |       |          | Yes No      |
| /AB/             | WO 91/15574     | 10/17/1991 | INTERNATIONAL |       |          |             |
|                  |                 |            |               |       |          |             |
|                  |                 |            |               |       |          |             |

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|      |  |
|------|--|
| /AB/ | COCQUEREL LAURENCE ET AL.; "Recognition of native hepatitis C virus E1E2 heterodimers by a human monoclonal antibody.", JOURNAL OF VIROLOGY, vol 77, no. 2, 20 January 2003 (2003-01-20), pages 1604-1609, XP002256295, ISSN:0022-538X, page 1604-, right-hand column, line 6- page 1605, right-hand column, line 12   |
| /AB/ | CHOUKHI AMELIE ET AL.; "Characterization of aggregates of hepatitis C virus glycoproteins.", JOURNAL OF GENERAL VIROLOGY, vol. 80, no. 12, December 1999 (1999-12), pages 3099-3107, XP002256296, ISSN: 0022-1317, page 3101, left-hand column, line 24- right-hand column, line 12; figure 1  |
| /AB/ | DELEERSNYDER V ET AL: "FORMATION OF NATIVE HEPATITIS C VIRUS GLYCOPROTEIN COMPLEXES", JOURNAL OF VIROLOGY, THE AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 71, no. 1, 1997, pages 697-704, XP002030792, ISSN: 0022-538X, cited in the application, page 698, right-hand column, line 20 - page 699, right-hand column, line 16; figure 4-  |
| /AB/ | FOURNILLIER A ET AL.; "Expression of noncovalent hepatitis C virus envelope E1-E2 complexes is not required for the induction of antibodies with neutralizing properties following DNA immunization", JOURNAL OF VIROLOGY, THE AMERICAN SOCIETY FOR MICROBIOLOGY, US,, vol. 73, no. 9, September 1999 (1999-09), pages 7497-7504, XP002191425, ISSN: 0022-538X, abstract   |
| /AB/ | SEONG YOUNG RIM ET AL: "Immunogenicity of the E1E2 proteins of hepatitis C virus expressed by recombinant adenoviruses.", VACCINE, vol. 19, no. 20-22, 2001, pages 2955-2964, XP0022569297, ISSN: 0264-410X, abstract  |
| /AB/ | PUMEECHOCKCHAI W ET AL.; "Hepatitis C virus particles of different density in the blood of chronically infected immunocompetent and immunodeficient patients: Implications for virus clearance by antibody", JOURNAL OF MEDICAL VIROLOGY, vol. 68. no. 3, November 2002 (2002-11), pages 335-342, XP008025913, ISSN: 0146-6615, page 335, left-hand column, page 337, left-hand column - right hand column, line 10, page 340, left-hand column, paragraph 2 - page 341, right-hand column, last paragraph |
| /AB/ | DELPUECH OONA ET AL.; "The hepatitis C virus (HCV) induces a long-term increase of interleukin-10 production by human CD4+ T cells (H9)", EUROPEAN CYTOKINE NETWORK, vol. 12, no. 1, March 2001 (2001-03), pages 70, left-hand column, last paragraph - right-hand column, paragraph 1   |
| /AB/ | BARTOSCH BIRKE ET AL: "Infectious hepatitis C virus pseudo-particles containing functional E1-E2 envelope protein complexes.", JOURNAL OF EXPERIMENTAL MEDICINE, vol. 197. no. 5, 3 March 2003 (2003-03-03), pages 633-642, XP002267934, ISSN: 0022-1007, page 633, left-hand column, line 1 right-hand column, line 1; figure 2   |
| /AB/ | GRANT P R ET AL.; "Quantification of HCV RNA levels and detection of core antigen in donations before seroconversion", TRANSFUSION (BETHESDA), vol. 42, no. 8, August 2002 (2002-08), pages 1032-1035, XP001174198, ISSN: 0041-1132, page 1034, right-hand column, line 16- line 24  |

EXAMINER: /Agnieszka Boesen/

DATE CONSIDERED 03/06/2008

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

\* English language abstract provided for the Examiner's convenience